



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/680,498	10/06/2003	Keng L. Wong	42P14101C	5511

7590 04/21/2006

Michael A. Bernadicou
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP
Seventh Floor
12400 Wilshire Boulevard
Los Angeles, CA 90025

EXAMINER

LUU, AN T

ART UNIT PAPER NUMBER

2816

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/680,498

Applicant(s)

WONG ET AL. 

Examiner

An T. Luu

Art Unit

2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,7,8,13-16,19,20,25-28 and 41-44 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

- 5) ☐ Claim(s) _____ is/are allowed.

- 6) ☒ Claim(s) 1-4,7,8,13-16,19,20,25-28,41-44 is/are rejected.

- 7) ☐ Claim(s) _____ is/are objected to.

- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

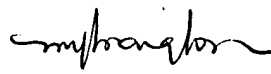
Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some * c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


MY-TRANG NUTON
PRIMARY EXAMINER

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Applicant's Amendment filed on 3-2-06 has been received and entered in the case. Claims 1-4, 7-8, 13-16, 19-20, 25-28 and 41-44 are pending. The rejections set forth in the previous Office Action are revised to reflect amendment of claims as indicated below. In addition, Terminal Disclaimer filed on 3-27-06 is not approved since signing attorney is not list.

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1, 13, 25 and 41-44 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8 of the US Patent 6,778,033. Although the conflicting claims are not identical, they are not patentably distinct from each other because the scopes of claims 1, 13, 25 and 41 of the instant application are essentially the same that of claims 1-8 of the US Patent 6,778,033 (i.e., each and every limitations of claims 1 and 13 are found on claims 1 and 8 of the US Patent 6,778,033). It is noted that the limitation "*wherein the voltage signal is coupled to power a plurality of distributed oscillators, and wherein the plurality of distributed oscillators are coupled to drive a*

Art Unit: 2816

clock distribution network asynchronously with respect to an external clock” is seen as intended use of the above apparatus. Changing term from “*used*” to “*coupled*” does not change the scope of claim since “*the voltage signal*” is an end result of the inventive circuit. “*The voltage signal*” can be used, coupled, applied or provided to various devices, including but not limited to plurality of oscillators.

As to claims 25 and 41, the scopes of these claims are similar to that of claim 5 of the US Patent 6,778,033. Claim 5 of the US Patent 6,778,033 does not recited the location of a voltage control circuit and location of a power source with respect to a core of an integrated circuit (i.e., internally or externally). However, it would have obvious to one having an ordinary skill in the art at the time the invention was made to fabricate the voltage control circuit, internally or externally, with respect to the IC since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70. Further, there is no difference in the operation of the voltage control circuit if it is located “ON” or “OFF” the IC.

As to claims 42-44, the scopes of these claims are similar to that of claims 6-8 of the US Patent 6,778,033.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2816

4. Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by the Pulvirenti reference (U.S. Patent 6,366,154).

Pulvirenti discloses in figure 2 an apparatus comprising a bandgap device 5 to produce a reference voltage V_{bg} based on a desired power 11; and a decision device (OPAMP; PT) to receive the reference voltage from the bandgap device and to receive a voltage signal from a power source (R1, R2), the decision device to determine whether the voltage signal received from the power source corresponds to the desired power level as required by claim 1. It is noted that the limitation "*wherein the voltage signal is coupled to power a plurality of distributed oscillators, and wherein the plurality of distributed oscillators are coupled to drive a clock distribution network asynchronously with respect to an external clock*" is seen as intended use of the above apparatus.

As to claim 2, the decision device comprises an amplifier OPAMP to compare the reference voltage (+ terminal) and the voltage signal (- terminal), and to output a result signal (output of OPAMP) based on the comparison.

As to claim 3, the decision device further comprises a decision mechanism (transistor PT) to receive the result signal output from the comparing device and to make a decision regarding operation of the power source.

As to claim 4, operation of amplifier OPAMP determines if the voltage signal is not at the desired power level.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Pulvirenti reference (U.S. Patent 6,366,154).

Pulvirenti discloses all the claimed inventions of claims 7 and 8, except for teaching where the voltage control circuit is physically located with respect to a core of an integrated circuit (i.e., internally or externally). It would have obvious to one having an ordinary skill in the art at the time the invention was made to fabricate the voltage control circuit, internally or externally, with respect to the IC since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70. Further, there is no difference in the operation of the voltage control circuit if it is located "ON" or "OFF" the IC.

7. Claims 13-16, 19-20 and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Holst et al. reference (U.S. Patent 6,127,880) in view of the Pulvirenti reference (U.S. Patent 6,366,154).

Holst discloses in figure 6 and 1 an apparatus comprising a clock distribution network (LO/L1 CLK DIST.); at least one oscillator coupled to the clock distribution network so as to provide a clock signal on the clock distribution network; and a power control circuit (FILTER as seen in figure 1 for active power supply filter) to control power (PLLVDD or IOVDD) applied to

Art Unit: 2816

the at least one oscillator as partially required by claim 13. Again, the limitation “*wherein the voltage signal is coupled to power a plurality of distributed oscillators, and wherein the plurality of distributed oscillators are coupled drive a clock distribution network asynchronously with respect to an external clock*” is seen as an intended use.

Holst does not disclose the power control circuit being specifically configured as required by claim. Pulvirenti discloses the power control circuit (explained previously) being configured as required by claim 13.

It would have been obvious to one skill in the art at the time invention was made to incorporate the power control circuit taught by Pulvirenti in place of the power control circuit taught by Holst since Pulvirenti’s circuit would provide an advantage of easy tuning the output voltage to a desired voltage level.

As to claims 14-16, the rejections of claims 2-4 are also applicable herein.

As to claims 19-20, the scopes of claims are similar to that of claims 7-8. Therefore, they are rejected for the similar reason set forth above.

As to claims 25-28, the scopes of these claims are similar to those of claims 13-16 in combination with claims 7-8. Therefore, they are rejected for the same reasons set forth above. It is noted that the whole structure in figure 6 is seen as a processor core whereas the physical location of a power source does not differentiate the claimed invention from the prior art as noted in the rejection of claims 7-8 noted above.

Response to Arguments

8. Applicant's arguments filed 3-2-06 have been fully considered but they are not persuasive. Examiner has revised the rejection to reflect amendment of claims.

Terminal Disclaimer

9. An attorney or agent, not of record, is not authorized to sign a terminal disclaimer in the capacity as an attorney or agent acting in a representative capacity as provided by 37 CFR 1.34 (a). See 37 CFR 1.321(b) and/or (c).

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 2816

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to An T. Luu whose telephone number is 571-272-1746. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

An T. Luu
4-7-06 *an*


MY-TRANG NUTON
PRIMARY EXAMINER